

Lauren H. Redler, MD Adult & Pediatric Sports Medicine

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Physical Therapy Prescription for:

Eval & Treat: 2x/week x 12 weeks

Dr. Redler's PT Protocol: Non-Operative Management for Juvenile Osteochondritis Dissecans of the Knee

Diagnosis:			

Weeks 1-2

On a weekly basis, assess the following:

- Measure girth of knee: mid-patella
- Measure range of motion of knee, flexion and extension
- Grade patient ability to terminally extend knee (quad sets) poor, good, normal
- Grade patient's subjective report of pain on a verbal pain rating scale 0-10 (10 being the greatest)
- Assess gait pattern, instruct on proper heel to toe gait. Instruct on use of crutches.
- *For range of motion and crutch use follow physician's orders

A re-evaluation should be performed weekly.

Exercises: Strive for 2 sets of 20 repetitions three times a day.

- 1. Active assisted heel slides with towel
- 2. Active assisted knee extensions (short arc or long arc)
- 3. Quad sets or straight leg raises (if there is no lag)
- 4. Prone active hamstring curls
- 5. Active bilateral heel raises

Stretches

Hamstrings (with towel)
Gastrocnemius (with towel)
Perform each stretch twice with a 30 second hold.

Weeks 3-6

Exercises

- 1. Progress heel slides to bike (start with 10 minutes, and add 5 minutes per week). Perform bike 1 x day. 5x/week.
- 2. Active knee extensions (terminal or long arc, depending on location of OCD lesion). *
- 3. Active straight leg raise.*
- 4. Active prone hamstring curls. *
- 5. Continue bilateral heel raises.
- 6. Leg press or 45° wall slides.

*Add resistance in $\frac{1}{2}$ pound increments. Once patient can complete 2 sets of 20, add another $\frac{1}{2}$ pound weight. Do not exceed 2 pounds per week.

Stretches

Add pain-free rectus stretch to previous stretches.

Weeks 6-8

Continue previous exercises. Continue previous stretches.

Progress:

- heel raises to unilateral
- leg press to unilateral

Add walking program 3x/week. Progress from 15 minutes to 30 minutes over 4 weeks.

Weeks 9-12

Continue previous exercises. Continue previous stretches.

Continue walking building up to 45 minutes, 3x/week.

At week 12, assess patient's strength by doing 1 set to fatigue with the patient's most recent training weight.

Straight leg raise Knee extension Hamstring curl Heel raises Leg press

When strength grade is 70% of unaffected limb, patient can begin to run after clearance from M.D. When 90% strength of unaffected limb is attained and patient can run 10 minutes without pain or swelling, patient can return to agility type sports after being cleared by M.D. Patient must complete Return to Sport Agility Protocol without pain or swelling.

Additional Instructions:					
Lauren H. Redler, MD	Date				